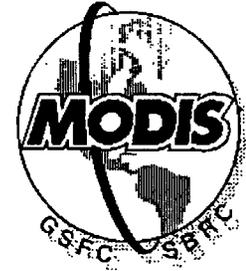
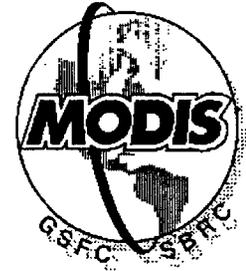


MODIS CONTRACT STATUS



- ◆ COST CAPS ARE BEING MET, BUT SCHEDULE IS SLIPPING
SCHEDULE IS ABOUT 2¹/₂ MONTHS BEHIND PLAN
- ◆ SLACK ON EM IS -35D; ON PFM +48D.
EOS AM PROJECT HAS ADDITIONAL SCHEDULE CONTINGENCY
WE EXPECT TO GIVE SCHEDULE RELIEF TO SBRC.
- ◆ CURRENT SBRC COST OVERRUN PROJECTION IS 10%
- ◆ SBRC MANPOWER IN AUGUST 1993: 174

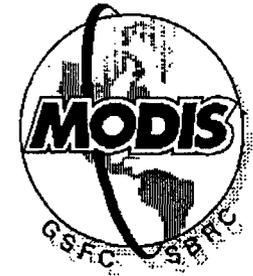
MODIS TECHNICAL STATUS



- ◆ SBRC CONDUCTED MAJOR EXERCISE TO EXORCISE GHOST LIGHT
RESULTS ARE BETTER THAN OUR MOST OPTIMISTIC EXPECTATIONS
- ◆ SNR PERFORMANCE MARGINS ARE $> 25\%$, EXCEPT FOR LOWER MARGIN IN BAND 36
- ◆ REGISTRATION PREDICTIONS STILL MEET 10% GOAL IN MOST BANDS,
AND 20% SPEC IN ALL BANDS
- ◆ SOME DETECTOR CROSSTALK CONCERNS ON PC HgCdTe
IMPROVEMENTS DEMONSTRATED ON R&D EFFORT
- ◆ RADIATION TESTS OF THREE COOLED FILTERS HAS SHOWN VERY LITTLE EFFECT
- ◆ THE ENGINEERING MODEL AFT OPTICS PLATFORM AND AFOCAL TELESCOPE BENCH
ARE COMPLETE. VIBRATED WEEK OF 13 SEPTEMBER, WITHOUT PROBLEM

R. R. WEBER
MODIS SCIENCE TEAM MEETING
29 SEPTEMBER 1993

MODIS SUBSYSTEM OVERVIEW



SBRC HARDWARE DEVELOPMENT IS PROCEEDING WELL

FOCAL PLANES	EM ASSEMBLIES ARE COMPLETE, WAITING FOR FILTER ASSEMBLIES A FEW DEAD ELEMENTS IN EM FOCAL PLANES (1 IN SWIR/MWIR, 1 IN LWIR)
STRUCTURE	OPTICAL BENCH ASSEMBLY SUCCESSFULLY VIBRATED IN SEPTEMBER BERYLLIUM MAINFRAME CONTRACT IN PLACE AT ABC – MATERIAL RCVD
MECHANISMS	SCAN BEARING LIFE TESTS UNDERWAY NOW PDR ON SCAN MECHANISM AT SCHAEFFER MAGNETICS IN AUGUST
ELECTRONICS	ALL PRINTED WIRING BOARDS BUT ONE COMPLETELY DESIGNED
OPTICS	TEN BANDPASS FILTERS LATE, NOW IN FINAL TEST, SWIR SUBSTRATE LATER
THERMAL	ALL ENGINEERING MODEL COOLER PARTS ARE NOW AT SBRC
CALIBRATION	SBRC PREDICTIONS CONTINUE TO SAY SPECS ACHIEVABLE
SENSITIVITY	ALL BANDS MEET SPEC
GSE	STE, GSE STIMULUS EQUIP, MODIS CALIB FACILITY – PROGRESSING WELL
SOFTWARE	GSE WELL-DEFINED, FLIGHT S/W LAGGING DUE TO MANPOWER PROBLEMS

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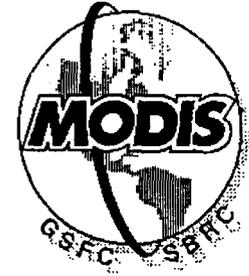
FUTURE MODIS DATES



- ◆ PERFORMANCE MEASUREMENT REVIEW 4 - 8 OCTOBER 1993
- ◆ FINAL FILTER DELIVERIES 15 OCTOBER 1993
- ◆ CRITICAL DESIGN REVIEW DRY RUN 8 - 11 NOVEMBER 1993
- ◆ CRITICAL DESIGN REVIEW 7 - 9 DECEMBER 1993
- ◆ SOFTWARE CRITICAL DESIGN REVIEW 10 DECEMBER 1993
- ◆ NEXT QUARTERLY MANAGEMENT REVIEW 16 DECEMBER 1993
- ◆ STRUCTURAL MODEL TESTING COMPLETE JULY 1994
- ◆ EM INTEGRATION COMPLETE AUGUST 1994
- ◆ EM TESTING COMPLETE MARCH 1995

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MODIS GHOST LIGHT ISSUE



GHOST LIGHT, WAS OBSERVED IN SEAWIFS TESTS IN SPRING 1993.

- ◆ THE IMPLICATIONS FOR MODIS WERE IMMEDIATELY CLEAR; ANALYSIS CONFIRMED.

PROBLEM

- ◆ BANDPASS FILTERS REFLECT OUT-OF-BAND LIGHT
- ◆ SOME OF THIS REFLECTED LIGHT RETURNS TO DIFFERENT PLACE ON FOCAL PLANE

CONSEQUENCE

- ◆ ENERGY FROM CLOUD, OR OTHER BRIGHT OBJECT, WILL SMEAR OUT
- ◆ IMAGING AND RADIOMETRY DEGRADED

ACTION

- ◆ SBRC INSTITUTED A HIGH PRIORITY GHOSTBUSTING TEAM, WITH GSFC SUPPORT

RESULT

- ◆ GHOSTBUSTERS DID SUPERB JOB OF ANALYSIS AND REDESIGN
- ◆ PROBLEM VIRTUALLY ELIMINATED – BETTER THAN WE IMAGINED POSSIBLE

R. R. WEBER
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